

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A forehearth color concentrate comprising a non-smelted agglomerated interspersions of particles for use in coloring glass, said concentrate comprising by weight from about 50% to about 95% of a glass component and from about 4% to about 50% of a binder, ~~said glass component comprising by weight from about 15% to about 35% chromium oxide~~ wherein the glass component comprises one or more glass frits comprising by weight from about 8% to about 22% Na₂O, from about 15% to about 60% SiO₂, from about 0% to about 25% B₂O₃, from about 0% to about 25% K₂O, from about 0% to about 3% Li₂O, from about 0% to about 2% Al₂O₃, from about 0% to about 15% CaO, from about 0% to about 5% TiO₂, from about 0% to about 1% F₂ and from about 15% to about 35% chromium oxide.

Claim 2 (currently amended): The forehearth color concentrate according to claim 1 wherein the glass component comprises one or more glass frits comprising by weight from about ~~5%~~ 8% to about ~~30%~~ 22% Na₂O, from about 15% to about 60% SiO₂, from about ~~0%~~ 4% to about ~~25%~~ 18% B₂O₃, from about 0% to about 25% K₂O, from about 0% to about 3% Li₂O, from about 0% to about 2% Al₂O₃, from about 0% to about 15% CaO, from about 0% to about 5% TiO₂, from about 0% to about 1% F₂ and from about 15% to about 35% chromium oxide.

Claim 3 (original): The forehearth color concentrate according to claim 2 wherein the one or more glass frits further comprise up to about 20% by weight of one or more coloring oxides.

Claim 4 (currently amended): ~~The forehearth color concentrate according to claim 1 wherein the glass component comprises a glass frit comprising~~ A forehearth color concentrate comprising a non-smelted agglomerated interspersions of particles for use in coloring glass, said concentrate comprising by weight from about 50% to about 95% of

a glass component and from about 4% to about 50% of a binder, said glass component comprising a glass frit comprising by weight from about 8% to about 22% Na_2O , from about 30% to about 45% SiO_2 , from about 4% to about 18% B_2O_3 , from about 1% to about 9% K_2O , from about 0% to about 2% Li_2O , from about 0% to about 1% Al_2O_3 , from about 0% to about 5% CaO , from about 0% to about 3% TiO_2 , from about 0% to about 1% F_2 , up to about 20% coloring oxides, and from about 17% to about 33% chromium oxide.

Claim 5 (original): The forehearth color concentrate according to claim 1 wherein the binder comprises a silicate of an alkali metal selected from the group consisting of potassium, lithium and sodium.

Claim 6 (original): The forehearth color concentrate according to claim 5 wherein the binder comprises sodium silicate.

Claims 7-11 (canceled)

Claim 12 (currently amended): A color concentrate glass frit for use in for use in either forming a non-smelted agglomerated interspersed of particles for use as a forehearth color concentrate or for use as a direct addition to the forehearth of a glass furnace, said glass frit comprising by weight from about 5% 8% to about 30% 22% Na_2O , from about 15% to about 60% SiO_2 , from about 0% to about 25% B_2O_3 , from about 0% to about 25% K_2O , from about 0% to about 3% Li_2O , from about 0% to about 2% Al_2O_3 , from about 0% to about 15% CaO , from about 0% to about 5% TiO_2 , from about 0% to about 1% F_2 , and from about 15% to about 35% chromium oxide.

Claim 13 (original): The color concentrate glass frit according to claim 12 wherein the glass frit further comprises up to about 20% by weight of one or more coloring oxides.

Claim 14 (currently amended): ~~The color concentrate glass frit according to claim 12 wherein the glass frit comprises~~ A color concentrate glass frit for use in for use in either

forming a non-smelted agglomerated interspersion of particles for use as a forehearth color concentrate or for use as a direct addition to the forehearth of a glass furnace, said glass frit comprising by weight from about 8% to about 22% Na₂O, from about 30% to about 45% SiO₂, from about 4% to about 18% B₂O₃, from about 1% to about 9% K₂O, from about 0% to about 2% Li₂O, from about 0% to about 1% Al₂O₃, from about 0% to about 5% CaO, from about 0% to about 3% TiO₂, from about 0% to about 1% F₂, up to about 5% coloring oxides, and from about 17% to about 33% chromium oxide.

Claims 15-20 (canceled)

Claim 21 (new): The forehearth color concentrate of claim 3 wherein the coloring oxides are selected from the group consisting of CoO, Co₃O₄, CuO, Fe₂O₃, MnO₂, NiO, and V₂O₅.

Claim 22 (new): The forehearth color concentrate of claim 21 wherein the forehearth color concentrate comprises up to about 10 wt % of coloring oxides.

Claim 23 (new): The forehearth color concentrate of claim 21 wherein the forehearth color concentrate comprises one to six coloring oxides selected from the group consisting of CoO, Co₃O₄, CuO, Fe₂O₃, MnO₂, NiO, and V₂O₅.

Claim 24 (new): The forehearth color concentrate of claim 22 wherein the forehearth color concentrate comprises up to about 10 wt % of two to five oxides selected from the group consisting of CoO, Co₃O₄, CuO, Fe₂O₃, MnO₂, NiO, and V₂O₅.

Claim 25 (new): The forehearth color concentrate of claim 1 wherein the glass component comprises by weight 38.5% SiO₂, 15.0% Na₂O, 11.0% B₂O₃, 5.0% K₂O, 2.0% CaO, 2.0% TiO₂, 1.0% Li₂O, 0.5% CoO, and 25.0% Cr₂O₃.

Claim 26 (new): The forehearth color concentrate of claim 1 wherein the binder comprises one or more materials selected from the group consisting of borates,

phosphates, silicates, fluorides, carbonates and hydroxides of lithium, sodium, magnesium, potassium, calcium, and barium.

Claim 27 (new): The forehearth color concentrate of claim 1 wherein the binder is selected from the group consisting of borax, potassium pentaborate, potassium metaborate, potassium tetraborate, calcium borate, hemisodium phosphate, monosodium phosphate, disodium phosphate, trisodium phosphate, monopotassium phosphate, dipotassium phosphate, tripotassium phosphate, monoammonium phosphate, diammonium phosphate, monocalcium phosphate, dicalcium phosphate, tricalcium phosphate, sodium acid pyrophosphate, tetrasodium pyrophosphate, tetrapotassium pyrophosphate, calcium pyrophosphate, sodium tripolyphosphate, potassium tripolyphosphate, calcium tripolyphosphate, potassium metaphosphate, sodium trimetaphosphate, sodium monofluorophosphate, calcium monofluorophosphate, sodium tetrametaphosphate, sodium silicate, potassium silicate, sodium fluorosilicate, calcium fluorosilicate, sodium aluminum fluoride, calcium fluoride, lithium fluoride, anhydrous potassium fluoride, potassium fluoride dihydrate, potassium bifluoride, sodium fluoride, sodium carbonate, barium carbonate, sodium hydroxide, lithium hydroxide, potassium hydroxide, boric acid, orthophosphoric acid, and fluorosilicic acid.

Claim 28 (new): The forehearth color concentrate of claim 25 comprising one to six color oxides selected from the group consisting of CoO , Co_3O_4 , CuO , Fe_2O_3 , MnO_2 , NiO , and V_2O_5 .

Claim 29 (new): The forehearth color concentrate of claim 25 comprising two to five color oxides selected from the group consisting of CoO , Co_3O_4 , CuO , Fe_2O_3 , MnO_2 , NiO , and V_2O_5 .

Claim 30 (new): The color concentrate glass frit of claim 13 comprising one to six coloring oxides selected from the group consisting of CoO , Co_3O_4 , CuO , Fe_2O_3 , MnO_2 , NiO , and V_2O_5 .

Claim 31 (new): The color concentrate glass frit of claim 30 wherein the glass frit comprises 38.5% SiO_2 , 15.0% Na_2O , 11.0% B_2O_3 , 5.0% K_2O , 2.0% CaO , 2.0% TiO_2 , 1.0% Li_2O , 0.5% CoO , and 25.0% Cr_2O_3 .